

Current Listing of Claims:

The current listing of claims is as follows:

Claims 1-28 (previously cancelled)

29. (currently amended) A multi-layered ePTFE graft comprising:
a first ePTFE tubular structure having a first internodal distance;
a second ePTFE tubular structure having a second internodal distance different than said first internodal distance, said second ePTFE tubular structure being disposed about said first ePTFE tubular structure; and
a self-sealing ~~material~~ gel interposed between said first and second ePTFE tubular structures, wherein said gel is selected from the group consisting of gelatin, collagen, albumin, casein, algin, carboxymethyl cellulose, carageenan, furcellan, agarose, guar, locus bean gum, gum arabic, hydroxyethyl cellulose, hydroxypropyl cellulose, methyl cellulose, hydroxyalkylmethyl cellulose, pectin, partially deacetylated chitosan, starch and starch derivatives, including amylase and amylopectin, xanthan, polylysine, hyaluronic acid, and its derivatives, heparin, their salts, and mixtures thereof.
30. (previously presented) A multi-layered graft according to claim 29 wherein said first internodal distance is greater than said second internodal distance.
31. (previously presented) A multi-layered graft according to claim 29 wherein said second ePTFE tubular structure is disposed externally about said first ePTFE tube.
32. (previously presented) A multi-layered graft according to claim 29 wherein said self-sealing material further comprises a material selected from the group consisting of thermoplastic

elastomers, silicones, silicone rubbers, synthetic rubbers, polyurethanes, polyethers, polyesters, polyamides, fluoropolymers and combinations thereof.

33. (previously presented) A multi-layered graft according to claim 29 wherein said self-sealing material comprises a single layer having resealable properties.

34. (previously presented) A multi-layered graft according to claim 32 wherein said self-sealing material comprises an elastomeric polymer layer.

35. (previously presented) A multi-layered graft according to claim 34 wherein said self-sealing elastomeric polymer layer adheres to said first and second ePTFE tubular structures.

36. (previously presented) A multi-layered graft according to claim 35, wherein said adherence is by chemical means, mechanical means or a combination thereof.

37. (previously presented) A multi-layered graft according to claim 34 wherein said elastomeric polymer layer is impregnated with said gel to enhance sealing properties thereof.

38. (previously presented) A multi-layered graft according to claim 34 wherein said elastomeric polymer layer comprises an internodal distance sufficient to promote cell endothelialization and/or tissue ingrowth.

39. (previously presented) A multi-layered graft according to claim 34 wherein said elastomeric polymer layer comprises an internodal distance sufficient to promote enhanced strength and handling characteristics of the graft.

40. (previously presented) A multi-layered graft according to claim 29 wherein said self-sealing material is flowable.

41. (currently amended) A multi-layered ePTFE vascular graft useful for repeated hemoaccess comprising:

a first ePTFE tubular structure having a first internodal distance;

a second ePTFE tubular structure having a second internodal distance different than said first internodal distance, said second ePTFE tubular structure being disposed about said first ePTFE tubular structure; and

a self-sealing gel interposed between said first and second ePTFE tubular structures, wherein said gel is selected from the group consisting of gelatin, collagen, albumin, casein, algin, carboxymethyl cellulose, carageenan, furcellan, agarose, guar, locus bean gum, gum arabic, hydroxyethyl cellulose, hydroxypropyl cellulose, methyl cellulose, hydroxyalkylmethyl cellulose, pectin, partially deacetylated chitosan, starch and starch derivatives, including amylase and amylopectin, xanthan, polylysine, hyaluronic acid, and its derivatives, heparin, their salts, and mixtures thereof.

42. (previously presented) A multi-layered graft according to claim 41 wherein said first internodal distance is greater than said second internodal distance.

43. (previously presented) A multi-layered graft according to claim 41 wherein said second ePTFE tubular structure is disposed externally about said first ePTFE tube.

44. (previously presented) A multi-layered graft according to claim 41 wherein said self-sealing material comprises a single layer having resealable properties.

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45. (new) A multi-layered ePTFE graft comprising:
a first ePTFE tubular structure having a first internodal distance;
a second ePTFE tubular structure having a second internodal distance different than said first internodal distance, said second ePTFE tubular structure being disposed about said first ePTFE tubular structure; and
a biodegradable material interposed between said first and second ePTFE tubular structures.
46. (new) A multi-layered graft according to claim 45, wherein the biodegradable material is a gel.
47. (new) A multi-layered ePTFE graft comprising:
a first ePTFE tubular structure having a first porosity; and
a second ePTFE tubular structure having a second porosity different than said first porosity, said second ePTFE tubular structure being disposed about said first ePTFE tubular structure;
wherein the graft exhibits a radial tensile strength of at least about 0.48 kg/mm^2 .
48. (new) A multi-layered ePTFE graft comprising:
a first ePTFE tubular structure having a first porosity; and
a second ePTFE tubular structure having a second porosity different than said first porosity, said second ePTFE tubular structure being disposed about said first ePTFE tubular structure;
wherein the graft is capable of withstanding elongation of at least about 690% without breaking.

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49. (new) A multi-layered ePTFE graft comprising:
- a first ePTFE tubular structure having a first porosity; and
 - a second ePTFE tubular structure having a second porosity different than said first porosity, said second ePTFE tubular structure being disposed about said first ePTFE tubular structure; and
 - a self-sealing material interposed between said first and second ePTFE tubular structures, wherein the graft exhibits no or immeasurable leakage 30 seconds subsequent to puncture with a water source.